

Claims

[c1] What is claimed is:

1. A liquid crystal display comprising a first panel positioned on a front surface of a backlight unit, and a second panel positioned on a back surface of the backlight unit; wherein the backlight unit provides light to both of the first panel and the second panel to enable either of the panels to display images.
2. The liquid crystal display of claim 1 wherein the backlight unit comprises:
a first light guide plate positioned on a back surface of the first panel;
a second light guide plate positioned on a back surface of the second panel;
at least a light source positioned at a first side of the backlight unit, and at least a second light source positioned at a second side of the backlight unit; and
a reflector positioned between the first side and the second side to reflect light emitted from the first light source and the second light source to the first panel and the second panel.
3. The liquid crystal display of claim 2 wherein the first

light source and the second light source comprise fluorescent lamps.

- [c4] 4. The liquid crystal display of claim 2 wherein the first light source and the second light source comprise light emitting diodes.
- [c5] 5. The liquid crystal display of claim 2 further comprising a lamp reflector surrounding the first light source and the second light source.
- [c6] 6. The liquid crystal display of claim 2 wherein the first light guide plate comprises patterns for destroying total reflection of light.
- [c7] 7. The liquid crystal display of claim 6 wherein the patterns comprise printing dots, non-printing dots and grooves.
- [c8] 8. The liquid crystal display of claim 2 wherein the second light guide plate comprises patterns for destroying total reflection of light.
- [c9] 9. The liquid crystal display of claim 8 wherein the patterns comprise printing dots, non-printing dots and grooves.
- [c10] 10. The liquid crystal display of claim 1 wherein the first panel and the second panel display the same images.

- [c11] 11. The liquid crystal display of claim 1 wherein the first panel and the second panel display different images.
- [c12] 12. The liquid crystal display of claim 1 wherein the backlight unit comprises:
 - a first optical film and a first diffusion sheet positioned on a back surface of the first panel;
 - a second optical film and a second diffusion sheet positioned on a back surface of the second panel; and
 - at least a light source positioned between the first diffusion sheet and the second diffusion sheet, and light emitted from the light source passing through the first diffusion sheet and the second diffusion sheet to be uniformly transmitted to the first panel and the second panel.
- [c13] 13. The liquid crystal display of claim 12 wherein the light source comprises a plurality of light emitting diodes positioned on a first surface of a printed circuit board to face the first panel, and a plurality of light emitting diodes positioned on a second surface of the printed circuit board to face the second panel.
- [c14] 14. The liquid crystal display of claim 12 wherein the light source comprises a plurality of fluorescent lamps.
- [c15] 15. The liquid crystal display of claim 12 wherein the

first optical film and the second optical film comprise at least a diffuser sheet and a prism sheet.